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Thanks,
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A B S T R A C T

A BANDPASS FILTER WITH CARRIER FREQUENCY REDUCTION

5 The invention provides a bandpass filtering method in which two frequency transpositions are performed in parallel on an input signal ~~(SE)~~ for filtering using respective first and second upstream mixing signals ~~(SM1, SM2)~~ that are substantially in phase quadrature, so as to obtain respective first and second transposed signals ~~(ST1, ST2)~~, and the two transposed signals are filtered respectively by two lowpass filters ~~(F1, F2)~~, the frequency of the transposition signals (ω_0) and the passband $(B/2)$ of the low-pass filters being related to
10 the frequency of the input signal (ω_i) and to the passband desired for the bandpass filter, then respective frequency transpositions are performed on the first and second filtered transposed signals ~~(STF1, STF2)~~ using two
15 respective downstream mixing signals ~~(SMV1, SMV2)~~ and two downstream mixing signals ~~(SMV1, SMV2)~~ using a two
 method being characterized in that a common oscillator
20 ~~(LO)~~ is used which is coupled with a first phase shifter ~~(MFM1)~~ to produce the upstream mixing signals and which is coupled with a second phase shifter ~~(MFM2)~~ to produce the downstream mixing signals, and in that the phase shifters
 are used in opposite manner on the first and second signals
25 ~~(V1, V2)~~ receives the phase-advanced output signal from one of the two phase shifters and the phase-delayed output signal from the other of the two phase shifters.

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